

JEFFRIES' (B. Joy.)

White sarcomatous intra-ocular
tumor ***



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WHITE SARCOMATOUS INTRA-OCULAR TUMOR.
ENUCLEATION. By B. JOY JEFFRIES, M.D., Boston,
Mass.

FEBRUARY 5TH, 1873, a woman, aged 40, applied to me, having V.O.D. = $\frac{2}{3}$, V.O.S. Jäger No. 16, with some portions of the field. At twenty feet can see my arm or hand moving over some parts of the retina. The visual field was taken on the register. Ophthalmoscopic examination shows a pinkish nerve and clear media. From close against the nerve, up and in, is a growth pushing forward, the retinal vessels running smoothly over it. The end against the nerve is oval. The whole, as seen, seems the size of a small almond. It has a whitish-gray color. Only within a week, the patient says she has noticed her *present* loss of sight; but, upon close questioning, her vision in this left eye has failed for some months back. There is no pain in the eye, but, as she expresses it, a sensation of "heaviness" and "fatigue." The patient did not exhibit any other sign of morbid growth. The tumor was decided to be most probably sarcoma, and an enucleation strongly advised. This was finally consented to and done under ether, February 19th, 1873. To satisfy the friends of the existence of a tumor, the globe was necessarily opened at once. The vitreous was of normal consistency, but had a yellowish tinge. The retina became readily detached from over the tumor, with retinal pigment adhering to it. The tumor was of the size above mentioned. The specimen was put in Müller's fluid till March 13th, 1873, when it was again carefully examined, and all the internal structures found good. The growth was not wholly attached to the sclerotic. The line of demarcation was also perfectly distinct. It belonged to and occupied

the place of the choroid, reaching as far as this encircles the optic-nerve entrance. The nerve, on section, seemed healthy. The tumor may have *pressed* the nerve, but it did not involve it. The tumor was something over half an inch in length, reaching farther forward than the ophthalmoscope showed. Its thickness was about one third of its length. Section of the tumor showed it to be non-vascular, yellowish white, homogeneous, pretty firm, distinct from the sclerotic, occupying the space and place of the choroid, up to but not involving the nerve. A layer of retina with pigment, or a layer of choroidal pigment, peeled off the surface of the tumor. Under the microscope it was found to be spindle-cell, and round, and ovoid white sarcoma. The cells as broad and three times the length of a blood-corpuscle. There was no pigment. For quite similar case, *vide* Knapp, "Intra-ocular Tumors," Tab. XIII., Fig. 58.

INTRAOULAR TUMOR. WHITE FUSIFORMED-
CELL SARCOMA. ENUCLEATION. By B. JOY JEF-
RIES, M.D., Boston, Mass.

A MAN, aged 60, came to me April 1st, 1873, complaining of pain over left side of head and in the left eye. Vision was reduced to the perception of light eccentrically. The pupil was dilated with atropine, and with the ophthalmoscope the fundus was blurry, the nerve dimly seen. A tumor was noticed on the inner side, in the ciliary region, just reaching into the dilated pupil. It reached backward beyond the middle of the globe, and the retinal vessels were seen running over it. It was thought to be sarcomatous, and enucleation advised and performed under ether, April 3d, 1873. The globe was at once opened and the tumor found as above. The preparation placed in Müller's fluid.

The man looked in fair health and had been a hard worker. He however complained of some head symptoms, such as "uneasiness" in head and ear. This last Dr. H. L. Shaw examined and reported "slight chronic difficulty." These very slight cerebral symptoms were not thought to militate against good hopes from immediate enucleation. April 11th, 1873, the patient for the first time complained of some pain just in front of left ear, or rather tenderness on pressure. A small gland here was slightly swollen. The lids had puffed more than usual after enucleation, giving a thought of impending erysipelas. All these symptoms, however, passed off within a few days.

June 24th, 1873, the specimen was taken from the preserving fluid, and a section made through the centre of the tumor horizontally, and through iris, lens, and cornea, all in natural

position. The substance of the tumor was firm, homogeneous, whitish, and no pigment was seen. It was attached to the sclerotic, about the size of a small filbert, reaching forward to the insertion of the iris, and backward beyond the median line. It touched the back of the lens, pressing forward the ciliary muscle and processes. The sclerotic lying against it was perfect. It occupied the place of the choroid, pushing the retina inward on its surface. The rest of the globe and optic nerve seemed perfectly normal. The microscope showed it to be a fusiformed-cell white sarcoma, such as Knapp gives in Tab. XII., Figs. 50-53, in his monograph on intra ocular tumors.

TWO CASES OF HERPES ZOSTER OPHTHALMICUS
DESTROYING THE EYE. By B. JOY JEFFRIES, M.D.,
Boston, Mass.

1st CASE.—March 14th, 1873, a man, at. 52, applied to me, from whom and his wife I obtained the following account. Thirty-four days ago, he noticed his left eye a little blood-shot, and his forehead, eyelids, and side of his nose became red, and "awfully swelled" within the next two days. The parts were very painful, and he had intense "neuralgic" pain over his head on the left side. An eruption appeared, which left scabs, lasting two or three weeks. He insists that he had no sleep for the first week, and has had no good rest for three weeks. He presents all the appearance of a man exhausted by a severe attack of ophthalmic shingles. There are still some crusts up to the hair, also on the nose and lower lid; one on the brow, over the exit of the frontal nerve. There is pain all over the scalp on the left side, although but little blush of the surface. Patient can not distinguish any difference of sensation on the two sides. The upper lid is swollen and droops a little over the lower. The man can not open this eye. The globe is injected, and the cornea looks badly inflamed and infiltrated. A four-grain solution of atropine was ordered, and quinine freely. March 22d, 1873, there is still some pain over the forehead. The cornea is sloughing in parts. March 26th, the cornea has opened with an irregular slough, and the aqueous flows off. No pus runs, and no pain. April 11th, 1873, the cornea has healed with a flattened cicatrix. No pain. 19th, cornea flat, less irritated. Vision a "white cloud." 25th, the same. The quinine and atropine have been continued. May 2d, 1873, less pain in head. The

patient feels it in cold weather. May 9th, 1873, no pain now. Continue quinine.

2D CASE.—Mrs. Blank, aet. 64, states, for several years she has had frequent headaches in the morning. Commencing at least ten days and nights before Sunday, September 8th, 1872, she had neuralgic pain of steadily increasing severity, confined entirely to the right side of the head. On Wednesday, the 11th, her physician was called and prescribed hot applications. An eruption appeared during the following two or three days, over the scalp, forehead, and side of the nose to the tip, on right side. This eruption, when out, was called erysipelas. Nothing was applied to limit it. The eruption was all out by the end of a week. The patient was relieved of the hard pain when it appeared. Crusts then formed, one on the forehead, over the exit of the frontal nerve. The crusts came off by the end of a week, but re-formed. The right eye seemed greatly affected, the lids so swollen as to close it. The symptoms were so bad that by the following Sunday a solution of nitrate of silver was ordered, one drop to be used at a time. As this solution did not seem to be of benefit, it was made stronger. The globe was not so painful, but the lids secreted. Her physician said the eye "was like a ball of blood." The stronger solution was used a week, but the patient complained of its being too painful, and a zinc wash was substituted. She could see for the first few days, but by the second Sunday after the commencement of the attack vision was gone. These statements were definitely given, and corroborated by her daughter, bringing her to me, October 4th, 1872.

The patient then presented a person weak and feeble, evidently worn out with pain consequent on a severe attack of herpes zoster ophthalmicus, in the right side, marked traces of which she now bore. The whole affected surface, namely, scalp, forehead, and side of nose, was intensely red. A large crust still remained on the scalp in front of the vertex. Reddened scars showed where other crusts had been. The patient was still suffering from considerable pain. The right eye was tender to touch, through the lids. Ciliary redness, and a large

central slough of the cornea, stained with nitrate of silver. There was marked sympathetic irritation of the other eye, so that enucleation was thought of, somewhat prevented by the patient's weak condition. A solution of atropine, grs. iv. to $\frac{3}{4}$ j., was applied to the eye several times a day, the patient kept quiet, and quinine given freely. Her general condition at once improved. By October 7th, the upper margin of the cornea was seen and the pupil behind, the anterior chamber existing. Ten days later, the symptoms were somewhat better; the light can now be more freely borne by the left eye, previously extremely sensitive. She complains of neuralgic pain of peculiar character, "prickling," and "stinging of bees." The patient went home, a short distance from the city, in greatly improved bodily condition.

November 5th, 1872, I saw her again. The last crust, from near the vertex, came off to-day, about two months from commencement of disease. The peculiar numbness complained of has now disappeared. There is, however, a difference of sensation; namely, a loss of it over the affected parts. There is still a redness and blush over the skin. The left eye is again more sensitive to light than when she went home. She attributes it to taking cold, that special day, in the cars. The globe does not present so much ciliary redness. More than half the size of the cornea, there is a circular, central crust, exactly the appearance of the incrustation round the mouth and stopper of a vial long used for solution of arg. nit. It has a dry, dull, metallic lustre, and quite opaque, and looks as if the sloughing substance of the cornea had united with the silver. Above, there is a clear enough ring of the cornea for the patient to count fingers through. There is some anterior chamber, but the aqueous evidently drains through this silver crust.

November 22d, 1872, eleven weeks after the commencement of the attack, I again saw the patient, who still complains of some soreness over the scalp and eyebrow. This soreness is growing less. She repeats, it is not pain, but "soreness in the skin." There is yet a blush over the surface. The left, unaffected eye she can use better. The right has darting pains. The cornea looks worse than November 5th, as if

slowly sloughing away. There is no anterior chamber, and vision is gone. It looks as if the scale of crust would slough off. I have not seen the patient since.

In my Boylston Prize Essay on Diseases of the Skin, published two years ago, I said, in reference to herpes zoster: "New facts about it are, that it has been now seen on all the different regions of the skin, from the head to the feet, on the inside of the nose, and on the tongue. It has been noticed to occur repeatedly in the same individual. It not very unfrequently appears on both sides of the body at the same time, and then, perhaps, not over corresponding nervous tracts. It affects one side of the body as often as the other. It is more common in April, May, October, and November. It may occur as early as ten, seven, or five months; is not uncommon in children. It may be accompanied or followed by paralysis. It may leave lasting or permanent neuralgia, and that of an intense character. It may be followed by dangerous sloughing, and finally, in the aged, it may cause fatal prostration. When affecting the ophthalmic nerve, it has naturally attracted the attention of ophthalmic surgeons, who have especially studied it, and report that it may greatly injure or destroy the eyeball."

The reports since published give this curious disease a still worse reputation. Dr. Weidner reports a fatal case in the *Berliner klin. Wochenschrift*, Jahrgang 1870, No. 7. Prof. E. Wagner, another in the *Archiv der Heilkunde*, Bd. 11, 4 Heft, 1870, p. 321. Prof. Oscar Wyss, of Zurich, a third, in the same Archiv, No. 12. This last case was most carefully dissected by Prof. Horner with Prof. Wyss. Death occurred during the attack of ophthalmic shingles, from œdema of lungs, due to the extensive purulent deposit causing possibly capillary embolus from the detritus, fat, etc., originating in the ophthalmic vein.

Prof. Horner said of this case, that the strictly pathological alterations in the eye were of two kinds: one set associated with the herpes zoster, as such, (cornea, iris, and ciliary nerves;) the other due to the phlebitis of the ophthalmic vein. To the latter he joins the considerable extravasation of blood in the

choroid and retina, the vessels of which were filled to their utmost.

As long ago as 1861, Bahrensprung, from his dissections, had asserted that "zoster depends on a disease of the ganglionic system, and in special cases on irritation of some one of the spinal ganglia or the Gasserian; yet the peripheral irritation of a nerve having ganglionic fibres in it may be followed by a limited eruption of zoster vesicles."

Now, Prof. Horner's dissection, in the case of ophthalmic shingles above mentioned, showed inflammation of the Gasserian ganglion, which, as it were, completes our evidence. Prof. Wyss concludes that his case teaches us "that zoster is a typical disease of the skin, caused by inflammation of the Gasserian ganglion, or of one of the spinal ganglia and the nerve passing through it. Ganglion as well as nerve may be partially affected. [NOTE.—This means not separately, ganglion of itself or nerve of itself, but a portion of the ganglion with its corresponding portion of nerve, whilst the rest of the ganglion and nerve remain intact.] In cases where the whole cutaneous nervous distribution of one branch is not affected by zoster, but only one region of a single branch, then we may assume simply a partial affection of the ganglion and nerve."

As another instance of the destructive and serious character of zoster, I would briefly mention a case reported in the May and June numbers of the *Annales d'oculistique*, 1872, by Dr. Hubsch, of Constantinople. Prof. Hebra, of Vienna, diagnosed and treated the case as one of chronic herpes zoster. There gradually came on white atrophy of both optic nerves; seen also by the late Prof. Gräfe, at Berlin. Furious delirium supervened, and the patient, when last seen, was fast hurrying to the grave, with evident signs of diffuse encephalitis.

Dr Albert Hybord published, last year, an interesting monograph on ophthalmic zona and the ocular lesions caused by it. He has sketched and analyzed ninety-eight cases, so far reported. The list includes the four cases I have previously given, one of which ended fatally. He concludes: 1st. Ophthalmic zona is an herpetic eruption developed over the territory of the first branch of the trigeminal. 2d. Ocular alterations coexist with the cutaneous eruption, the most important of which are keratitis and iritis. These may exist together or

singly; keratitis more frequent than iritis. 3d. Zona is the cutaneous expression of irritation or inflammation of distinct parts of the nervous system, (mixed nervous trunk, sensitive trunk, spinal ganglion, posterior sensitive root, posterior columns of the cord.) 4th. Ophthalmic zona is the cutaneous expression of irritation or inflammation of the first trigeminal branch. The process causing the eruption may be developed in the Gasserian ganglion, or in the track of the ophthalmic branch. 5th. The lesions of the cornea and iris belong to the same class of phenomena as the cutaneous; they are due to irritation or inflammation of the ciliary twigs of the nasal branch of the ophthalmic division. Most often they correspond to the distribution of the eruption in the cutaneous territory of the nasal nerve. 6th. The cutaneous eruptions and the ocular lesions are not dependent on the paralysis of the vaso-motors and consecutive neuro-paralytic hyperaemia. They must be referred to the direct influence of the nervous system on nutrition. Of all the theories suggested, the one seems most satisfactory and simple which attributes these trophic troubles to irritation of the trophic nerves.

To return now to the two cases of ophthalmic shingles I have reported above. In one, I have the direct testimony of the attending physician; in the other, that of the patient and daughter, that they were thought to be erysipelas. The nitrate of silver solution used in the one case could, of course, only add to the patient's pain and discomfort, if it really did not cause the loss of the eye. The eye was properly treated in the other case, by solution of atropine. Though zoster has now been repeatedly reported double on other portions of the body, no unfortunate creature has yet been seen with double ophthalmic shingles. We could wish an enemy nothing worse. Since Mr. Hutchinson, in special, wrote about this disease, cases have been apparently more often seen. This is because it is now recognized, and not so likely to be mistaken for erysipelas, with which, of course, many cases must have been formerly classed. I regret not being able to add something satisfactory in reference to treatment of the disease, or our means of controlling the lasting or permanent neuralgic pain following an attack. As this is passing through the press, I have under my care another extremely interesting case where remedies have afforded very great relief.

TRAUMATIC RUPTURE OF THE CHOROID, WITHOUT DIRECT INJURY OF THE EYE. By B. Joy JEFFRIES, M.D., Boston, Mass.

A YOUNG man, æt. 19, in September, 1871, was running into a barn, when his forehead struck a projecting timber, by which he was stunned. He was not, seemingly, much injured, the effect of the blow soon passing off. On the third day subsequent, he noticed "black specks before the left eye." For instance, as he was shooting on the beach, he imagined a flock of birds coming from the distance. For a month or two after this, he "could not tell a horse from a dog," and then could distinguish a portion only of an object. He judges his sight, in this respect, was worse than now. There are now, March 3d, 1872, no cerebral symptoms. No *muscæ volitantes*. Externally the eye looks perfectly healthy, and the media are clear. His field of vision, as taken by my register, would require a cut to be here given.

Search being made with the ophthalmoscope, disclosed an at first sight, quite healthy fundus and nerve. With the direct or upright image, however, there were seen two peculiar white, brilliant crescents, as choroidal scars, up and out from the nerve. Without my being able to say that the retina was detached or plicated, it certainly had in this region, including the crescents, a peculiar, glistening look, like a reflection from a brilliant, rough surface; toward the macula, also, the choroidal vessels could be seen, although with difficulty. The possibility of a separated retina having subsided, was suggested.

